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10/581,346	06/02/2006	Christian Funke	2400.0420000/VLC/L-Z	5037

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WASHINGTON, DC 20005

EXAMINER

BLAKELY III, NELSON CLARENCE

ART UNIT	PAPER NUMBER
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1614

MAIL DATE	DELIVERY MODE
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03/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,346	Applicant(s) FUNKE ET AL.	
	Examiner NELSON C. BLAKELY III	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application Status

Claims 1-4, 6 and 7 of the instant application are pending, and are presented for examination on their merits.

Applicant's Arguments

Applicant's arguments, filed 11/26/2008, have been fully considered. Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Election of Species

Applicant's affirmation of the election without traverse of a composition comprising a synergistically effective combination of compounds of the Formula (I), and at least one insecticidally active compound of groups 2 and 3, in the reply filed on 11/26/2008, is acknowledged.

In response to the previous reply from Applicant received 04/24/2008, Applicant elected:

(a) a single disclosed compound of the Formula (I); wherein

A¹ and A² are that of oxygen;

X¹ represents a nitrogen;

R¹, R², and R⁸ represent a hydrogen;

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R^3 and R^4 represent a C_1 - C_6 -alkyl group, i.e., $-CH_3$;

R^5 and R^7 represent a halogen, i.e., chlorine; and

R^9 represents a halogen, i.e., bromine;

(b) a specific insecticidally active compound of group 2 is chlorpyrifos; and

(c) a specific insecticidally active compound of group 3 is methiocarb.

Specification

The disclosure is objected to for the following informalities:

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to use of legal phraseology, "comprising" (line 1).

Correction is required. See MPEP § 608.01(b).

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

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requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

Claim Objections

Claims 2 and 3 are objected to for the following informalities:

With regard to claims 2 and 3, Applicant is encouraged to insert a “, (comma)” after the claim number, i.e., “The composition as claimed in claim 1, comprising...”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103 (Maintained)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm *et al.* (International Application Serial No. WO 03/015519 A1; Cited by Applicant), and in view of Brück *et al.* (U.S. Patent No. 6,576,661B1), as evidenced by EXTtoxNET (Extension Toxicology Network, Toxicology Information Briefs; *Cholinesterase Inhibition*), September, 1993 [online], [retrieved on 2008-05-22]. From the Internet <URL: <http://extoxnet.orst.edu/tibs/cholines.htm>> and Merriam-Webster's Medical Dictionary© [online], Merriam-Webster, Inc., 2002 [retrieved on 2008-05-22]. From the Internet: <URL: <http://dictionary.reference.com/browse/extender>>.

Applicant's Arguments

Applicant argues that though Lahm *et al.* specifically disclose the compound I-1-4, the reference does not specifically disclose combining said compound with one or more other biologically active compounds or agents, much less combining said compound with chlorpyrifos. Further, Applicant argues that the Examiner has not articulated a particular reason as to why a person of ordinary skill in the art reading Lahm *et al.* would select the compound I-1-4 from the 810 anthranilamide compounds disclosed, and combine it with other biologically active compounds or agents, i.e., chlorpyrifos, especially in light of Lahm *et al.* not disclosing chlorpyrifos as a preferred combination partner for said compound. Furthermore, Applicant argues that because Lahm *et al.* allegedly does not disclose descriptions or examples wherein an anthranilamide compound of Formula (I) is combined with one or more other biologically active compounds or agents, a combination disclosed by Lahm *et al.*, at most, may be synergistic.

Additionally, with regard to Brück *et al.*, Applicant argues that the disclosed cyclic ketoenol compound is a completely different class of insecticidal compound than the instantly claimed compound I-1-4, and there is nothing in the aforementioned references that would suggest the compound of Brück *et al.* is equivalent to the compound I-1-4 with respect to forming a synergistic combination with chlorpyrifos. Further Applicant argues that it would not have been obvious to one of ordinary skill in the art to envisage the substitution of the cholinesterase inhibitors (also carbamates) methomyl or oxamyl for methiocarb, as evidenced by EXTOWNET.

Examiner's Response

Applicant's arguments, filed 11/26/2008, have been fully considered but they are not persuasive.

With regard to instant claims 1-4, 6 and 7, Lahm *et al.* disclose, on page 4, line 30, through page 5, line 29 (more preferably page 5, lines 12-14), and reference claim 8 (lines 13 and 14), a "specifically preferred" compound of reference Formula (I) is the instantly claimed composition comprising a compound of Formula (I) whereby the substituents that correspond to Applicant's:

A¹ and A² are also that of oxygen;

X¹ also represents a nitrogen;

R¹, R² (reference constituent R^{4b}), and R⁸ also represent a hydrogen;

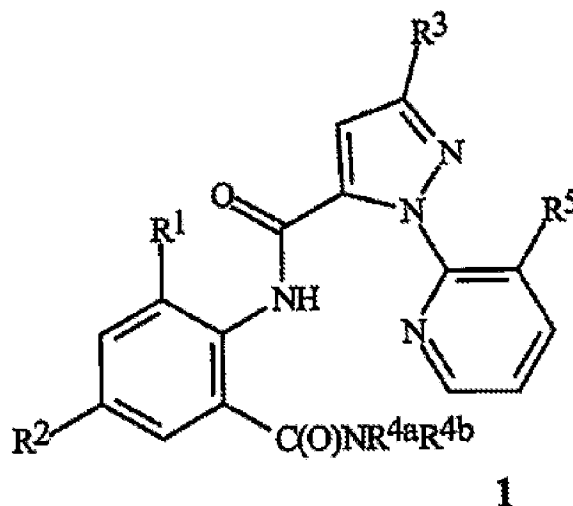
R³ (reference constituent R^{4a}) and R⁴ (reference constituent R¹) also represent a C₁-C₄-alkyl group, i.e., -CH₃;

R⁵ (reference constituent R²) and R⁷ (reference constituent R⁵) also represent a halogen, i.e., chlorine; and

R⁹ (reference constituent R³) also represents a halogen, i.e., bromine.

Below is an excerpt from the claims of the prior art reference, *supra*, to illustrate that the reference compound taught by Lahm *et al.* corresponds to Applicant's elected claimed compound of Formula (I):

1. A compound selected from Formula 1 or an *N*-oxide thereof



wherein

R¹ is CH₃, F, Cl or Br;

R² is F, Cl, Br, I or CF₃;

R³ is CF₃, Cl, Br or OCH₂CF₃;

R^{4a} is C₁-C₄ alkyl;

R^{4b} is H or CH₃; and

R⁵ is Cl or Br;

or an agriculturally suitable salt thereof.

In addition to the elected compound of Formula (I), Lahm *et al.* also disclose at least one additional biologically active compound or agent selected from insecticide, nematocide, acaricide or biological agents in the group consisting of chlorpyrifos, for example, in reference claims 1, 8 (lines 13 and 14), 10-13. It is noted that Lahm *et al.* fail to disclose specifically wherein chlorpyrifos is a "preferred" insecticide or acaricide, on reference page 62, lines 24-35; however, chlorpyrifos is, in fact, disclosed on

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reference page 61, line 16, as well as in reference claim 12, as at least one additional biologically active compound or agent contemplated by Lahm *et al.*

The Examiner acquiesces with Applicant in that Brück *et al.* disclose a structurally different compound, i.e., cyclic ketoenol, of Formula (I); however, as disclosed in the Abstract, the combinations of cyclic ketoenols of the Formula (I) and the active compounds listed, i.e., chlorpyrifos and methiocarb, have very good insecticidal and acaricidal properties. It is worth noting, Brück *et al.* disclose in column 3, A-2, and column 14, C-54, wherein chlorpyrifos and methiocarb, respectively, are preferred (thio)phosphates and carbamates contemplated by Brück *et al.* Additionally, in column 22, lines 11-51, Brück *et al.* disclose that surprisingly, the insecticidal and acaricidal action of the active compound combination according to the invention considerably exceeds the total of the actions of the individual active compounds, and a true synergistic effect, which could have been predicted, exists. In the instant excerpt, Brück *et al.* further disclose when the compounds are present in the active compound combinations according to the invention in certain weight ratios, the synergistic effect is particularly pronounced. It is worth noting that Brück *et al.* also disclose the preferred carbamates methomyl (C-55) and oxamyl (C-56) in column 14, lines 13-35.

Brück *et al.* fail to disclose the instant Formula (I), but do disclose an active ingredient combination having insecticidal and acaricidal characteristics. This reference serves merely to teach the inclusion of conventional (thio)phosphates and/or carbamates and their respective amounts. Additionally, a reference may be applied not only for what it expressly teaches by direct anticipation, but also for what one of ordinary

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skill in the art, at the time of the invention, might reasonably infer from the teachings.

See *In re Opprecht*, 12 USPQ 2d, 1235, 1236 (Fed. Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA 1976). In light of the foregoing, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

The EXTOWNET article serves in the evidentiary role of providing a relatively short list of organophosphate insecticides, i.e., chlorpyrifos, and carbamates, i.e., methiocarb, methomyl and oxamyl, on pages 2 and 3 under the section entitled "WHICH PESTICIDES CAN INHIBIT CHOLINESTERASE?". Additionally, on page 1, under the section entitled "WHAT IS CHOLINESTERASE?", the EXTOWNET article discloses wherein cholinesterase, one of many important enzymes needed for the proper functioning of the nervous systems of humans and insects, for example, is inhibited by certain chemical classes of pesticides, such as organophosphates (OPs) and carbamates (CMs). Moreover, one of ordinary skill in the art, at the time of the invention, would have been motivated to combine the instantly claimed compound of Formula (I), chlorpyrifos and methiocarb in a single combination composition in view of the combined teachings. MPEP § 2144.06 is directed to art-recognized equivalence for the same purpose. Alternatively, it allows the skilled artisan to combine equivalents that are known to treat the same purpose. It is *prima facie* obvious to use in combination two or more ingredients that have previously been used separately for the same purpose. *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Obviousness does not require absolute predictability, but only the reasonable

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expectation of success. Specific statements in the references that would spell out the claimed invention are not necessary to show obviousness since questions of obviousness involve not only what the references expressly teach, but also what they would collectively suggest to one of ordinary skill in the art, at the time of the invention. *In re Burckel* (CCPA) 201 USPQ 67.

Therefore, a skilled artisan would have envisaged the instantly claimed combination composition, comprising the instant compound of Formula (I) and chlorpyrifos, as disclosed by Lahm *et al.*, in combination with methiocarb, as disclosed by Brück *et al.*, as evidenced by the EXTOKNET article. One of ordinary skill in the art would have been motivated to combine the teachings of the aforementioned references when seeking a combination composition for controlling an invertebrate pest, wherein the insecticidal and acaricidal action of said combination considerably exceeds the total of the actions of the individual active compounds. It would have been obvious to one of ordinary skill in the art, at the time of the invention, because the combined teachings of the prior art are fairly suggestive of the claimed invention.

Accordingly, by reasons stated *supra*, and in the previous Office Action, mailed 05/28/2008, the instant invention, as claimed in claims 1-4, 6 and 7, is *prima facie* obvious over the combination of the aforementioned teachings.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NELSON C. BLAKELY III whose telephone number is (571) 270-3290. The examiner can normally be reached on Mon - Thurs, 7:00 am - 5:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phyllis G. Spivack/
Primary Examiner, Art Unit 1614
February 27, 2009

/N. C. B. III/
Examiner, Art Unit 1614